THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:-

- 1. A percutaneous lead assembly for supplying electrical signals to a medical device implanted within a body of a patient, said lead assembly comprising a flexible elongate member having a first portion adapted to remain external to the body of a patient, said first portion having a first diameter; and a second portion joined to said first portion and adapted to extend through a hole in a skin layer of the body of the patient, and wherein said second portion having a second diameter which is substantially smaller than said first diameter.
- 2. The percutaneous lead assembly as claimed in claim 1, wherein said first portion includes a shielding layer.
- 3. The percutaneous lead assembly as claimed in claim 1 or claim 2, wherein at least a segment of said second portion is covered with a textured surface.
- 4. The percutaneous lead assembly as claimed in claim 1, wherein said first portion and said second portion are joined by connectors.
- 5. The percutaneous lead assembly as claimed in claim 1, wherein said percutaneous lead assembly includes a lead restraint.
- 6. An external lead restraint for use with a percutaneous lead, wherein said lead is implanted within a body of a patient and extends through a hole in the patient's skin and characterised in that an excess length of lead is releasably secured near to the hole by releasable securing means affixed to the patient's skin.
- 7. A percutaneous lead assembly for supplying electrical signal to a medical device implanted within a body of a patient, wherein said lead assembly has

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a flexible elongate member including a first unshielded portion that extends through a hole in a skin layer of the body of the patient; and a second shielded portion which is joined to said first unshielded portion at a site external to the body of the patient.